

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P521822

Luminaire Tested: SQ4-WB-075U-075D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521822
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-075D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5740.1 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

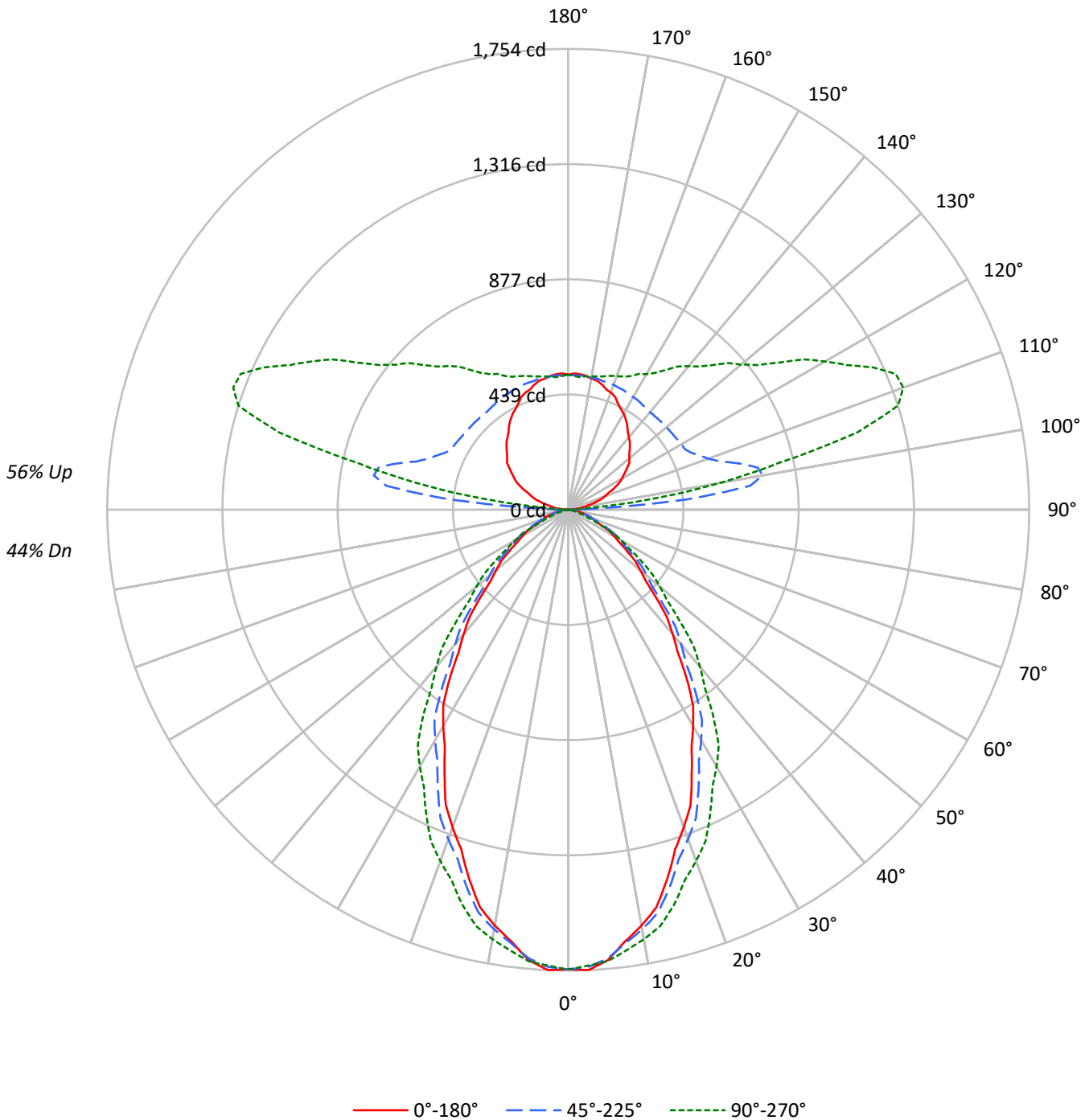
Input Watts (W): 55.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	98	94	90	87	89	86	83	80	72	70	68	59	57	56	47	46	45	39				
2	90	83	77	73	82	76	72	68	64	61	58	53	51	48	42	41	40	35				
3	82	74	67	62	76	68	62	58	58	53	50	48	45	42	38	37	35	31				
4	76	66	59	53	70	61	55	50	52	47	44	43	40	37	35	33	31	27				
5	70	59	52	46	64	55	49	44	47	42	38	39	36	33	32	30	28	25				
6	65	54	46	41	60	50	43	39	43	38	34	36	32	29	30	27	25	22				
7	60	49	42	36	55	46	39	34	39	34	30	33	29	27	27	25	23	20				
8	56	45	37	32	52	42	35	31	36	31	27	31	27	24	25	23	21	18				
9	53	41	34	29	48	38	32	28	33	28	25	28	25	22	24	21	19	17				
10	49	38	31	27	45	35	29	25	31	26	23	26	23	20	22	19	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16141	16141	16141
5°	15940	15882	15975
10°	15060	15196	15549
15°	13902	14224	14862
20°	12624	13100	13967
25°	11323	11941	13011
30°	10124	10787	12021
35°	8854	9494	10851
40°	7452	8044	9393
45°	6149	6680	7843
50°	5134	5598	6534
55°	4359	4803	5397
60°	3726	4165	4307
65°	2967	3502	2781
70°	2630	2733	1697
75°	2435	2217	1041
80°	2242	2040	898
85°	2032	1874	730

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7843 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.5	2.8
10°-20°	417.4	7.3
20°-30°	540.6	9.4
30°-40°	529.4	9.2
40°-50°	405.2	7.1
50°-60°	270.0	4.7
60°-70°	147.4	2.6
70°-80°	61.4	1.1
80°-90°	17.4	0.3
90°-100°	234.1	4.1
100°-110°	666.0	11.6
110°-120°	638.1	11.1
120°-130°	505.0	8.8
130°-140°	405.4	7.1
140°-150°	317.4	5.5
150°-160°	232.2	4.0
160°-170°	143.8	2.5
170°-180°	48.8	0.9
0°-30°	1118.5	19.5
0°-40°	1647.9	28.7
0°-60°	2323.1	40.5
0°-90°	2549.3	44.4
90°-120°	1538.2	26.8
90°-150°	2766.0	48.2
90°-180°	3191.0	55.6
0°-180°	5740.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1750	1750	1750	1750	1750	
5°	1721	1704	1715	1719	1725	160
15°	1456	1450	1489	1530	1556	406
25°	1112	1115	1173	1224	1278	512
35°	786	790	843	900	963	489
45°	471	480	512	551	601	368
55°	271	282	299	310	336	246
65°	136	147	160	140	127	141
75°	68	68	62	43	29	73
85°	19	19	18	11	7	21
90°	0	0	0	0	0	2
95°	25	101	453	157	97	29
105°	104	157	679	1199	1140	110
115°	192	232	515	1090	1280	189
125°	272	301	491	815	975	243
135°	332	360	485	689	778	256
145°	392	412	489	596	649	245
155°	447	458	501	539	560	207
165°	494	496	507	518	525	139
175°	518	515	513	510	506	49
180°	514	514	514	514	514	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1749.5	1749.5	1749.5	1749.5	1749.5
2.5°	1753.8	1738.2	1742.1	1742.0	1737.2
5°	1721.1	1703.8	1714.9	1718.9	1724.9
7.5°	1657.2	1644.1	1664.4	1679.4	1691.6
10°	1607.5	1596.2	1622.0	1643.9	1659.7
12.5°	1549.7	1540.3	1572.3	1601.6	1622.2
15°	1455.5	1450.2	1489.2	1529.8	1556.0
17.5°	1354.6	1352.0	1396.8	1444.1	1477.7
20°	1285.8	1285.1	1334.2	1383.4	1422.5
22.5°	1216.4	1218.1	1269.7	1320.9	1365.3
25°	1112.3	1115.3	1173.0	1224.1	1278.1
27.5°	1016.1	1017.4	1077.0	1131.0	1188.6
30°	950.3	954.1	1012.5	1068.4	1128.4
32.5°	884.6	889.0	946.2	1003.9	1065.2
35°	786.1	789.8	842.9	899.6	963.4
37.5°	684.4	689.5	736.6	790.3	853.0
40°	618.7	626.2	667.9	718.4	779.9
42.5°	555.5	564.8	603.4	651.3	706.9
45°	471.3	480.3	512.0	550.8	601.1
47.5°	398.9	409.2	433.6	466.9	509.9
50°	357.7	367.5	390.0	414.7	455.2
52.5°	321.5	331.2	351.3	370.3	404.9
55°	271.0	282.2	298.6	309.9	335.5
57.5°	229.5	240.3	253.3	258.4	273.9
60°	201.9	213.9	225.7	225.1	233.4
62.5°	176.7	186.9	198.7	190.5	191.0
65°	135.9	147.1	160.4	140.2	127.4
67.5°	109.8	112.2	125.9	97.8	82.6
70°	97.5	97.5	101.3	75.7	62.9
72.5°	85.8	85.8	82.3	61.6	48.2
75°	68.3	68.3	62.2	42.7	29.2
77.5°	52.7	52.1	47.6	31.8	21.2
80°	42.2	42.2	38.4	25.1	16.9
82.5°	33.0	33.0	29.8	19.6	12.6
85°	19.2	19.2	17.7	11.4	6.9
87.5°	6.8	6.8	6.1	3.7	3.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	7.8	41.4	96.1	28.0	21.1
95°	25.4	100.8	453.1	156.8	96.7
97.5°	46.7	118.1	697.9	499.4	342.2
100°	61.5	128.4	751.0	760.7	585.9
102.5°	77.9	139.4	739.3	973.7	821.1
105°	103.5	157.0	678.7	1198.9	1139.7
107.5°	129.5	177.4	608.0	1262.3	1315.0
110°	147.5	192.3	567.4	1238.0	1356.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	164.6	207.2	540.0	1180.6	1349.4
115°	192.4	232.5	514.7	1090.3	1280.3
117.5°	216.8	254.4	499.6	991.5	1192.8
120°	236.3	267.8	498.0	935.1	1127.9
122.5°	252.0	283.5	494.1	885.5	1064.7
125°	271.5	301.1	491.2	815.2	974.6
127.5°	292.8	320.5	489.7	773.1	904.5
130°	303.7	331.4	487.3	743.8	858.4
132.5°	315.4	342.4	487.3	721.0	826.4
135°	332.0	359.7	485.4	688.6	778.3
137.5°	347.7	374.6	485.2	661.1	738.7
140°	359.4	387.1	484.4	638.4	712.9
142.5°	372.7	395.8	486.7	620.3	687.1
145°	391.6	411.7	489.3	595.9	649.4
147.5°	407.8	427.3	493.6	571.4	617.6
150°	421.9	435.2	495.1	563.2	595.7
152.5°	432.8	446.9	496.7	552.3	582.4
155°	447.3	457.8	501.0	538.6	560.5
157.5°	465.2	471.5	502.0	532.4	548.0
160°	474.6	479.4	505.9	527.6	541.0
162.5°	480.1	485.6	506.6	523.7	534.0
165°	494.1	496.1	506.8	517.8	525.4
167.5°	503.7	502.0	511.3	516.3	519.3
170°	506.8	505.9	509.8	510.8	514.7
172.5°	513.9	510.6	512.1	509.3	512.3
175°	517.6	514.7	512.7	509.7	505.9
177.5°	519.1	514.6	512.1	509.0	509.8
180°	513.7	513.7	513.7	513.7	513.7

(END OF REPORT)